

## HIGH-SPEED SIGNAL POWER DETECTION CIRCUIT

### ABSTRACT OF THE DISCLOSURE

5           A signal power detector includes an input coupling circuit, a rectifying operational amplifier, a comparator, and a charge pump. The input coupling circuit is operably coupled to receive a signal and to convert the signal into a first input and a rectifying input. The rectifying operational amplifier is operably coupled to receive the first input and the rectifying input and to produce therefrom a rectified output signal that  
10 represents a peak of the received signal. The comparator is operably coupled to compare the peak value of the signal with an output peak value to produce a comparison value. The charge pump operably coupled to convert the comparison value into a corresponding current that represents the output peak value.